



# CLIMATE ACTION PLAN

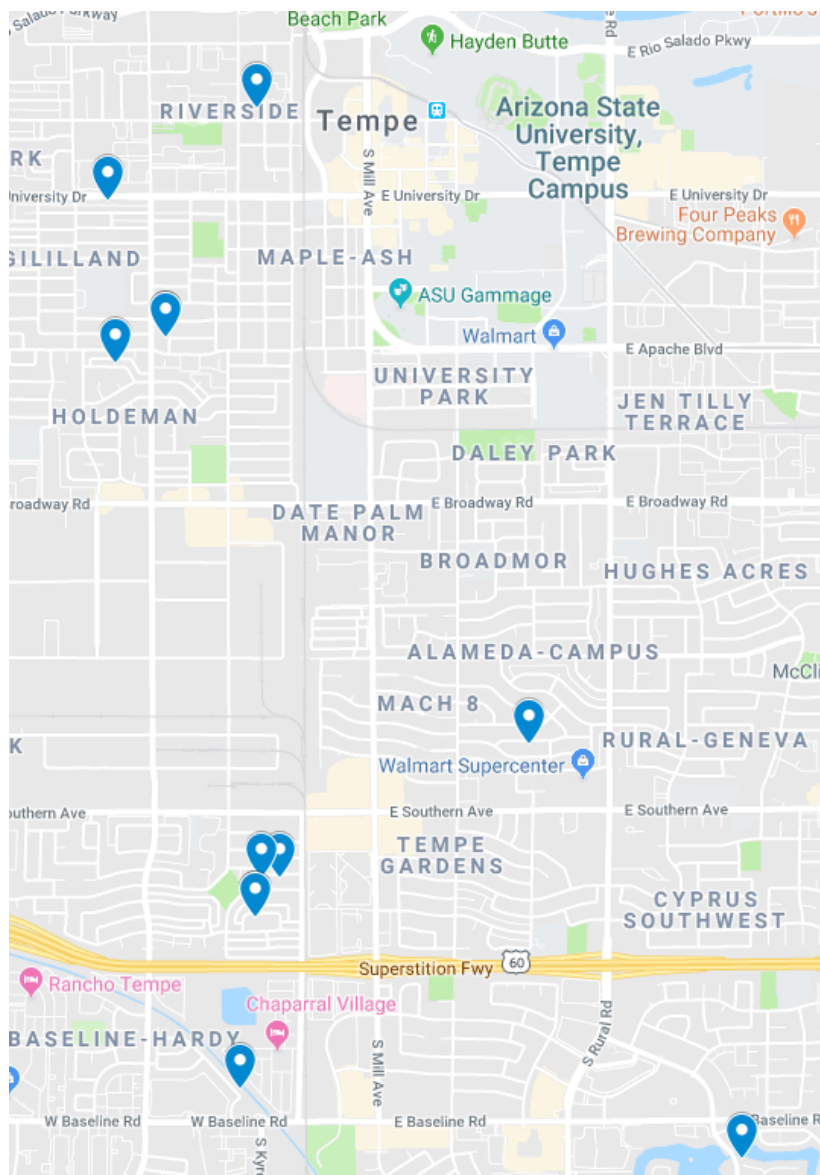
## Energy and Extreme Heat Elements Public Input Summary March 2019

### OVERVIEW

Feedback was collected on energy actions, including increasing investment in renewable energy and energy upgrades in buildings and actions to support extreme heat, including further investing in urban forestry, working to add shade and cool materials to buildings, and working to ensure all Tempe residents are prepared for extreme heat.

A public meeting was held on Feb. 26, 2019 with 21 attendees signing in and the topic was posted from Feb. 26 – March 12 on Tempe Forum. A total of 12 survey responses were received, 8 at the public meeting and 4 on Tempe Forum. Meeting attendees also provided input by participating in feedback exercises during the meeting.






### MAP OF SURVEY RESPONDENTS







## SURVEY RESULTS

### Extreme Heat

1. From the ideas and actions below, please select the ones you agree with or support:

		%	Count
A strategy to double the number of trees in Tempe over time is a good idea.		100.0%	11
If the city gave me a free tree to help shade my house, I would plant one and be willing to give it water.		54.5%	6
I think we should have a lot more fruit trees around the city.		45.5%	5
I would consider volunteering for occasional tree planting projects in my local community.		54.5%	6
I would consider donating to a citywide tree campaign in my city.		54.5%	6

2. From the ideas and actions below please select the ones you agree with or support:

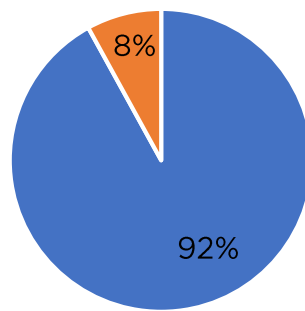
		%	Count
If there was a shaded pathway from my home to nearby shops, I would walk to those shops more than I do now.		41.7%	5
In hot weather, I sometimes cross the street in order to walk in the shade.		100.0%	12
I need more shade around the home/building I live in.		41.7%	5
I support requiring developers to provide shade and use cool materials in new buildings.		83.3%	10

3. Other comments or ideas related to extreme heat.

1. I'd like a city truck once a month to be in the hood toward the extreme heat probs, that and immature trees or snowboards. Build parks or movie theaters. Not needed extreme heat warnings, keep me inside. Trees need extra water, not off campus.
2. Put white asphalt around glass on high rises.
3. Relate the above to water conservation issues.
4. How do we balance the benefit of shade with use of water as a scarce resource?
5. Please continue research on Cool Seal reducing temperatures in Tempe, including a pilot neighborhood.
6. Do something to keep bus stops cool. The metal bus stops often radiate heat, and many bus stops, especially in residential areas, don't have any shade at all. A tree will do nicely, though other solutions may be more suitable depending on location.
7. Who's idea to cut down established trees for the solar canopy at the library. Who's idea to cut down established pecan trees that were shading the solar canopy. Shame. Developers who neglect established trees on building sites, Prohibit. The live oak trees on the north side of university for the union were killed by lack of water by the builder. Restriction on any established tree removal especially for development.

## Air Quality

### 4. Are you concerned about Tempe's air quality?



■ Yes (11) ■ No (1)

### 5. What should the City of Tempe do to improve local air quality? Select your top 2 priorities:

### 6. From the ideas and actions below please select the ones you agree with or support.

I may consider purchasing an electric vehicle in the next 5 years.

I support the City using taxpayer dollars to install electric vehicle charging stations at key locations in the city.

I would be willing to pay up to \$300 more when purchasing a home if it comes pre-wired with electric vehicle charging.

I support the City in changing city code to require electric vehicle charging stations in all new commercial and multi-family buildings.

### 7. Other comments or ideas related to air quality.

1. Of code, it helps them as a guide if they don't know what to do to avoid zoning costs but provide guidance above and beyond.
2. Stop burning wood outside, no leaf blowing.
3. Provide incentives to businesses to provide EV charging station to employees and customers. Charging during the day when the sun is up makes the most sense. Add air quality as performance measure for city.
4. Changing the city code to require that all parking lots have solar panels over them. It keeps the cars cool (reducing their ac consumption) and increases renewable energy generation. Might help mitigate extreme heat too. I like the design use at the Fry's store on Bell, because it shades not only the cars but the roads and walkways in the parking lot as well.
5. Public Utility Service infrastructure is mostly inadequate to service every home with an additional 50 amps capacity and they need to step up for improving service. My overhead service lines are over 50 years old and will not support every household with additional 50 amps for charging devices or Spas, Tankless water heaters or Accessory Dwelling Units. APS will not not upgrade any lines or undergrounding without a hefty fee. Some houses are still only 125 amp service in the older areas. Apartment Complexes do not have charging facilities and will not allow extension cords to run out on parking areas.

## Energy Efficiency and Renewables

**8. From the ideas and actions below please select the ones you agree with or support the city in pursuing.**

Offer free energy audits to homeowners to identify savings opportunities.  
Work with local utilities to offer special incentives to reduce energy use in homes.

Offer low interest financing options to homeowners wanting to do energy efficiency upgrades.

Offer upgrade assistance to low-income households with single-pane windows.

**9. Other comments or ideas related to energy efficiency and renewables.**

1. Encourage more than solar (wind).
2. APS already does the top two.
3. Production of concrete contributes 8% of GHG emissions globally. What can Tempe Climate Action Plan do to address this locally?
4. A lot of buildings in Tempe are rentals. Australia recently introduced a scheme whereby the cost of rooftop solar is shared between the tenant and the landlord, saving the tenant money on electricity and encouraging landlords to install solar panels. It won't work exactly, but maybe a source of inspiration. Energy audits are a waste of time and money. I had one done and learned nothing new: have double pane windows, use LED bulbs, and have Energy Star appliances. Their "leak detection" was pointless. Home Depot and Lowes already have financing options for appliances. Offering a rebate / other incentives will probably work better.
5. Housing which are seriously energy deficient need to be demolished, especially when the cost of utilities, gas, water, sewer and electric exceed the rental cost. There should be a Rent Cost/ Expenditures Ratio be formulated to assist renters and homeowners. This is not a market problem. This is a social problem.

## Tempe's Long-Term Goals

**10. Tempe has the goal of having a carbon neutral city government by 2035. Given this current goal, which of the following statements do you agree with or support.**

I would like to see Tempe adopt a goal of 100% clean energy for all homes and businesses by 2060 (the same goal as the City of Phoenix).

I would like to see Tempe reduce its emissions by 80% of 2015 levels by 2050 (the same goal as the City of Flagstaff).

I would like to see Tempe adopt a goal of 100% clean energy for all homes and businesses by 2035.

**11. Additional comments or proposals for carbon or clean energy goals for Tempe**

1. Invest in preseason discounts to prep landlords for their extreme heat. Apartments and common shared areas aren't free. Zero percent waste free sooner than later, near free in events, no recycling, only composting and require of a business to recycle free with city services.
2. I would like to see more creativity in energy solution than solar.

3. Get Tempe permit dept. out of the way of homeowners adding solar power. I started trying to add solar in 2010 and finally did it last year, 2018. The permit dept. was a continued obstruction in those 8 years, change utility panel despite what APS said. Replace almost all housewiring, keep panel edges 24" back from wall line, not from roof edge and so on.....Tempe requires much more than other cities around AZ.
4. How about 80% by 2035? The last 20% is difficult. Health care is responsible for 10% of GHG in US.
5. Tempe must be aggressive and lead Arizona to saving our planet before it's irreversible.
6. Is there a way to maybe work with utilities to get them interested in solar energy? For example, allow homeowners to "rent" their roofs to utility companies in exchange for a fixed discount on their monthly utility bill. From the customer's (homeowner's) perspective they are still charged as they normally are based on their usage, no mention of electricity generation needs to appear on the bill. The cost of the panels is on the utility, which is probably the main hurdle. Maybe Tempe can help facilitate banks/investors to work with the utilities?
7. Elimination of antiquated Fireworks Displays and replacing with drone shows sponsored by technology firms of Tempe. (1) Offer a massive free tree program for residents to plant in their yards, or even in public right-of-ways permitting the nearest resident is willing to water the tree. (2) Reduce or eliminate the minimum amount of parking spaces required for new developments. (3) Offer a rebate or incentive to developers to repurpose underused parking lots into green spaces or other types of uses that are more environmentally friendly. (4) Future-proof new parking lots to make sure they can easily transition into other uses once they're no longer needed.

## 12. Additional comments related to the Climate Action Plan

1. Solar isn't free, water meters need solar. This plan mustn't be restricted to just city buildings or facilities. GHG calculation monthly up our gas prices legally. Individual basis name tags on how people travel, can't they stay in?
2. Good work!
3. We are concerned about guaranteed water supply and the new construction of homes and multi-family structures. There must be limits.
4. Mitigating any Heat Island Effect. Utilizing cool reflective materials. Narrowing the Roads and minimizing parking areas